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PATENT CLAIMS

- A signal processing apparatus having at least one cross-fading device (9, 10, 11) for cross-fading signals, in which a plurality of inputs (7) for receiving input signals are provided and in which an output signal can be tapped off at an output (12), and having a control apparatus (13) for controlling the cross-fading device (9, 10, 11), characterized in that the control apparatus (13) has an input means (3) for inputting a specific cross-fading function for each input signal to be cross-faded.
 - 2. The signal processing apparatus as claimed in claim 1, characterized in that the cross-fading function assigned by inputting to each input signal to be cross-faded can be written to a store (14) and can be read from the store (14) for a cross-fading operation.
 - 3. The signal processing apparatus as claimed in claim 1, <u>characterized in that</u> the start time and the end time of the cross-fading function assigned to an input signal can be defined within a cross-fading interval.
 - 4. The signal processing apparatus as claimed in claims 1 to 3, <u>characterized in that</u> the direction of the fading profile can be chosen within the cross-fading interval.
- 5. The signal processing apparatus as claimed in claims 1 to 4, <u>characterized in that</u> a means for inputting a linear and/or nonlinear profile of the cross-fading function for each input signal is provided.
- 6. The signal processing apparatus as claimed in claim 5, <u>characterized in that</u> the input signals can be additively cross-faded in a manner dependent on defined assigned cross-fading functions.

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- 7. The signal processing apparatus as claimed in claim 1, <u>characterized in that</u> the input means for inputting specific cross-fading functions has a graphical user interface (22 to 33).
- 5 8. The signal processing apparatus as claimed in claim 6, <u>characterized by</u> a graphical user interface (22 to 33) having
 - a representation (fig. 2) of the time base of the input signals to be cross-faded within the cross-fading interval and/or
 - a representation (fig. 3) of the profiles of the cross-fading functions of the input signals to be cross-faded within the cross-fading interval and/or
 - a representation (fig. 4) of the additive cross-fading of the input signals to be cross-faded within the cross-fading interval.
- 9. A method for processing signals, in which a plurality of input signals are cross-faded in a control-dependent manner in order to generate an output signal, characterized in that each input signal to be cross-faded is assigned a specific cross-fading function.